

REMARKS

Claims 1-14 and 17-22 are pending in this application. By this Amendment, claims 1, 8 and 17 are amended, claims 18-22 are added, and claims 15-16 are canceled without prejudice to or disclaimer of the subject matter recited therein. No new matter is added.

Applicant appreciates the courtesies shown to Applicant's representative by Examiners Utama and Saadat in the November 1 personal interview. Applicant's separate record of the substance of the interview is incorporated into the following remarks.

I. Formal Matters

In the Office Action, claims 15 and 16 are objected to for improper dependency and rejected under 35 U.S.C. §101 for being directed to non-statutory subject matter. The objection and rejection are rendered moot by cancellation of these claims. Withdrawal of the objection and rejection are respectfully requested.

II. The Pending Claims Define Patentable Subject Matter

In the Office Action, claims 1-4, 8-10, and 15-17 are rejected under 35 U.S.C. §102(b) over U.S. Patent No. 6,050,823 to McClintic. This rejection is respectfully traversed.

As discussed during the interview, independent claims 1 and 8 are amended for clarity and recite a simulator and method, respectively, in which a simulator object (such as a race car) is manipulated in accordance with an operational input from an object operating section (such as a steering wheel or joystick) during simulation. Based on the operational input from the object operating system a vibration mechanism is driven when a predetermined vibration occurrence simulation state has occurred (such as when the car is driven into an object or onto a rough surface). Moreover, the vibration received by the simulator is set by an operator through a vibration condition setting, which can control at least one of vibration intensity, vibration pattern and vibration length (such as from user input control by selection of

variables displayed on a display screen). This is supported, for example, by Figs. 1-2C and pg. 11, line 26 to pg. 12, line 26.

Thus, in claim 1, there is: (1) a simulation calculation section which manipulates a simulator object in accordance with an operational input from an object operating section during simulation; (2) a vibration mechanism control section which drives the vibration mechanism based on the operational input from the object operating section when a predetermined vibration occurrence simulation state has occurred; and (3) a vibration condition setting section which sets how a vibration occurrence simulation state will be felt by setting at least one of vibration intensity, a vibration pattern and vibration length of the vibration mechanism using a separate operational input. Method claim 8 is similar.

McClintic is directed to a simulator in which the motion is pre-selected by an operator through the sequence arrangement of preprogrammed motion segments. Thus, as discussed during the interview, the McClintic simulator has no operator control during simulation.

In making the rejection, the Office Action acknowledges that vibration control is not explicitly mentioned, but alleges that McClintic's motion simulator is "inherently capable of producing vibration," even though only general physical movement is disclosed. Moreover, in making the rejection, the Office Action relies on col. 4, lines 40-45 and col. 3, lines 27-49 for both the simulation calculation section and the vibration condition setting section. However, both passages refer to the same selection of sequences of motion to be performed by the simulator. That is, col. 4 discusses the selection of the sequence of maneuvers, while col. 3 merely identifies three possible mechanisms to select the sequence of movement (touch screen 16, keyboard 18, or disk drive 20). However, during simulation, there is no control of an object. Instead, the whole simulator moves in accordance with the pre-programmed sequence.

Applicants' disclosure, on the other hand, is directed to a simulator in which a user controls an object during simulation with an operational input (such as a steering wheel or joystick). When the virtually controlled object (such as a race car) enters a vibration occurrence simulation state (such as by manipulating the object to hit a wall or drive onto a rough surface), the simulated vibration that is received is set by a separate input that is part of a vibration condition setting section that controls at least one of vibration intensity, vibration pattern, and vibration length. Thus, when vibration occurs is controlled by the first operational input during simulation while what type of vibration occurs during the vibration state is achieved by the second operational input of the vibration condition setting section.

Because the movement is completely controlled in McClintic by the singular step of selecting a pre-programmed sequence, the customization is of the movement path, not the type of vibration that occurs during a certain vibration state.

Thus, as agreed upon during the interview, McClintic fails to teach or suggest (1) a simulation calculation section which manipulates a simulator object in accordance with an operational input from an object operating section during simulation; (2) a vibration mechanism control section which drives the vibration mechanism based on the operational input from the object operating section when a predetermined vibration occurrence simulation state has occurred; and (3) a vibration condition setting section which sets how a vibration occurrence simulation state will be felt by setting at least one of vibration intensity, a vibration pattern and vibration length of the vibration mechanism using a separate operational input as recited in claim 1 and similarly recited in claim 8.

Withdrawal of the rejection is respectfully requested.

In the Office Action, claims 5-7 and 11-14 are rejected under 35 U.S.C. §103(a) over McClintic in view of U.S. Patent No. 6,262,583 to Braun. This rejection is respectfully traversed.

As discussed during the interview, Braun fails to overcome the deficiencies of McClintic with respect to independent claims 1 and 8. Accordingly, dependent claims 5-7 and 11-14 are allowable for their dependence on allowable base claims and for the additional features recited therein. Withdrawal of the rejection is respectfully requested.

New claims 18-22 are added. Claim 18 is similar to claim 17, but depends from claim 9. Claims 19 and 20 further define that selection is of vibration intensity, pattern and length. Claims 21-22 further define that setting is by a user. Claims 18-22 are allowable for their dependence on allowable base claims and for the additional features recited therein.

III. Claims 17-18 Define Statutory Subject Matter

Proposed claims 17-18 were discussed at the personal interview. Although claim 17 was not previously rejected under 35 U.S.C. §101, Examiners Utama and Saadat now question whether claims 17-18 are directed to an apparatus or a method as they relate to a computer-readable information storage medium which stores a program for implementing the method of claim 8 (or claim 9). Thus, it was alleged that these claims may require clarification to be statutory. Applicant respectfully disagrees and believes that claims 17-18 are proper and statutory in their current form.

As set forth in MPEP §2106.01(I), computer programs are often recited as part of a claim and Examiners should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. These guidelines set forth that "[w]hen a computer program is claimed in a process where the computer is executing the computer program's instructions, USPTO personnel should treat the claim as a process claim" and "[w]hen a computer program is recited in conjunction with a physical structure, such as a computer memory, USPTO personnel should treat the claim as a product claim."

In this case, claims 17-18 fit the latter category and should be treated as a proper, statutory product claim. That is, a computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permits the program's functionality to be realized and is thus statutory. See *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

IV. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the pending claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Stephen P. Catlin
Registration No. 36,101

JAO:SPC/ccs

Attachment:
Petition for Extension of Time

Date: November 20, 2007

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>
